USGS
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Earthquake Shaking 🟢 **Green Alert**

GSN USAID FROM THE AMERICAN PEOPLE
ANSS

PAGER
Version 3

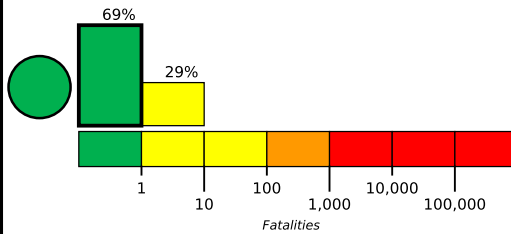# M 4.3, 8km SSW of Ponce, Puerto Rico

Origin Time: 2020-01-27 05:20:39 UTC (Mon 01:20:39 local)
Location: 17.9301° N 66.6238° W Depth: 6.0 km
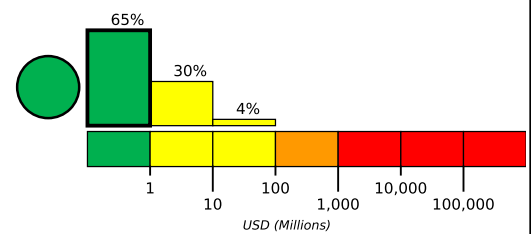
Created: 2 hours, 2 minutes after earthquake

Estimated Fatalities

69%
29%

1 10 100 1,000 10,000 100,000
Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.
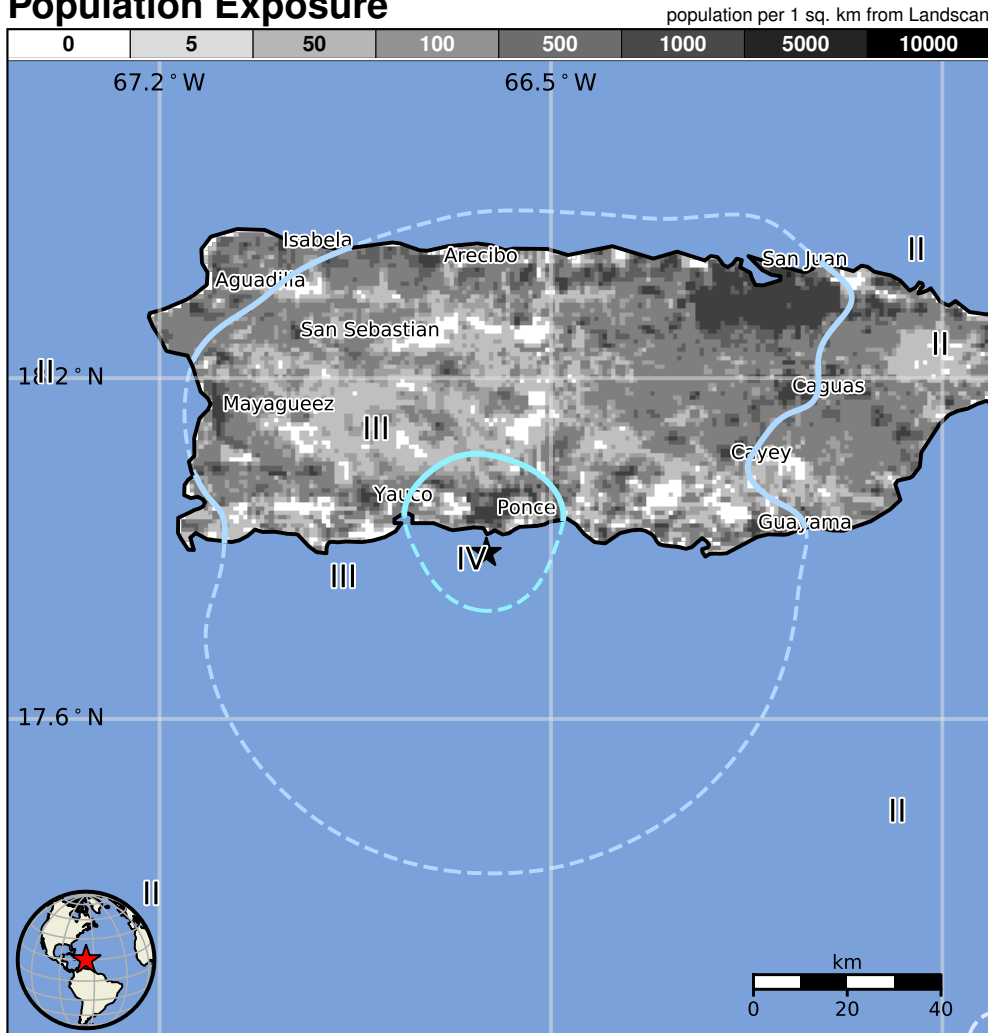
Estimated Economic Losses

65%
30%
4%

1 10 100 1,000 10,000 100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	3,067k	185k	7k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0	5	50	100	500	1000	5000	10000

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1979-03-23	259	6.6	VI(605k)	0
1980-11-12	356	5.9	VII(87k)	–
1984-06-24	290	6.7	VII(326k)	5

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	**Ponce**	**153k**
IV	Tallaboa Alta	2k
IV	Coto Laurel	4k
IV	Tallaboa	1k
IV	Capitanejo	3k
IV	Penuelas	7k
III	**San Juan**	**418k**
III	Bayamon	203k
III	Guaynabo	81k
III	Carolina	170k
III	**Caguas**	**87k**

bold cities appear on map. (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/pr2020027002#pager

Event ID: pr2020027002